

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF FEBRUARY 11, 2005

Prepared on January 20, 2005

ITEM NUMBER: 28

SUBJECT: CDOs for Areas of Special Biological Significance (ASBS) Dischargers, Monterey County; City of Pacific Grove, CDO No. 2005-0008; City of Monterey, CDO No. 2005-0020; The Pebble Beach Company, CDO No. 2005-0021; and City of Carmel, CDO No. 2005-0022

KEY INFORMATION

Locations: The City of Pacific Grove, the City of Monterey, the Pebble Beach Company, and the City of Carmel by the Sea, all within Monterey County

Discharge Type: Municipal Storm Water discharge to Areas of Special Biological Significance

Other Orders: The four municipalities are applying for coverage pursuant to the State Board Water Quality Order No. 2003 – 0005 – DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000004, Waste Discharge Requirements For Storm Water Discharges From Small Municipal Separate Storm Sewer Systems (Phase II Storm Water Permit)

SUMMARY

1. Cease and Desist Orders (CDO or Order) are being issued to the Pebble Beach Company, and the City of Carmel by the Sea, for illegal discharges to the Carmel Bay Area of Special Biological Significance (ASBS) and to the Cities of Pacific Grove and Monterey for discharges to the Pacific Grove Marine Gardens Fish Refuge and Hopkins Marine Life Refuge ASBS. This staff report addresses all four (4) CDOs.
2. The Pebble Beach Company, and the Cities of Carmel by the Sea, Pacific Grove, and Monterey (hereafter Discharger(s) or municipality(ies)) each operate their own municipal separate storm sewer system (MS4) which collects storm water runoff. An MS4 storm water discharge is defined as a point source discharge by the 1987 U.S. Clean Water Act amendment.
3. On March 21, 1974, the State Water Resources Control Board (State Board), in Resolution No. 74-28, designated 31 Areas of Special Biological Significance (ASBS). Subsequently, the State Board designated three additional ASBS for a total of 34. Among those ASBS designated were the Carmel Bay ASBS (ASBS No. 34), and the Pacific Grove Marine Gardens and Hopkins Marine Life Refuge ASBS (ASBS No. 19). Since 1983, the Ocean Plan has prohibited waste discharges to ASBS. Similar to previous versions of the Ocean Plan, the 2001 Ocean Plan (Resolution No. 2000-108) states: "Waste shall not be discharged to areas designated as being of special biological significance. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas."

4. Section 36710 (f) of Public Resources Code (PRC) prohibited point source waste to an ASBS. Senate Bill 512, amended PRC Section 36700(f) to read: "In a state water quality protection area¹, waste discharges shall be prohibited or limited by the imposition of special conditions in accordance with the Porter-Cologne Water Quality Control Act ...and implementing regulations, including, but not limited to, the California Ocean Plan ... adopted by the State Board. No other use is restricted."
5. On October 18, 2004, the State Board issued three (3) "Prohibition of Waste Discharges into the (respective) Area of Special Biological Significance" letters (Prohibition letter(s)), to the City of Pacific Grove, the Pebble Beach Company, and the City of Carmel by the Sea. The City of Monterey was not issued a Prohibition letter. The Prohibition letters explained that storm water discharge from each municipality violates the ASBS discharge prohibition in Section III.E.1 of the Ocean Plan. The Prohibition letters required the discharger to notify the State Board by January 1, 2005, as to whether the discharger intends to apply for an exception to the ASBS-prohibition. The City of Pacific Grove and the Pebble Beach Company have verbally indicated that they intend to apply for an exception.
6. Regional Board staff expects that the municipalities will be required to meet certain conditions in order to qualify for an exception. If the State Board issues an exception to the ASBS discharge prohibition, the State Board Order will control if there are any conflicts between the exception and the Draft CDO. The CDO will become null and void on the date that the State Board exception and any supporting CEQA documents become final and non-appealable.
7. Runoff from the City of Pacific Grove, the Pebble Beach Company, and the City of Carmel by the Sea discharges directly to ASBS areas via surface runoff collected and carried in gutters to storm drains. The City of Monterey storm water system at Eardley Avenue discharges to the City of Pacific Grove storm drain system, which discharges to ASBS No. 19. It is likely that at least some storm water from all four (4) MS4s also discharges to the ASBS via sheet flow or similar non-engineered flow paths. The California Ocean Plan prohibits both point source and non-point source discharges to an ASBS. Therefore any runoff from the City of Pacific Grove, the City of Monterey, the Pebble Beach Company, and the City of Carmel by the Sea which discharges to an ASBS, whether the runoff is within the storm drain system (gutters, pipes, etc.) or not, violates the ASBS-discharge prohibition. Storm water discharge occurs whenever there is enough rain for the city streets to have runoff that flows to the ocean. In order to be in compliance with the Ocean Plan, the Cities must either: 1) redesign or redirect the storm drain system so that no runoff enters in or near the Carmel Bay ASBS; or 2) apply for an exception to the ASBS discharge prohibition.
8. The Draft CDO contains conditions and timeframes for the conditions to be met. The conditions are based on the guidelines and requirements of: 1. The Scripps Institution of Oceanography ASBS-discharge exception granted in 2004 by the State Board (Scripps exception); 2. The 2001 California Ocean Plan (Ocean Plan); and 3. The Phase II Storm Water Permit. Staff also reviewed the State Board "Informational Document, Public Scoping Meeting for the Proposed Amendment of the Water Quality Control Plan for Ocean Waters Of California (California Ocean Plan) December 2003. A summary of the requirements in the Draft Cease and Desist Order is as follows:
 - a. The City must EITHER: a) file for an exception to the ASBS-discharge prohibition by March 1, 2005, and comply with the milestones in the

¹ State water quality protection areas include all ASBS. (PRC § 36700(f).)

CDO; OR b) cease all dry weather waste discharges to the ASBS no later than January 1, 2007, and cease all wet weather waste discharges no later than January 1, 2008. If the Discharger elects to seek an exception and State Board does not grant the exception by January 1, 2008, then the Discharger shall cease all waste discharges to the ASBS by January 1, 2010.

9. Should the Discharger request an exception, then the Discharger shall meet all of the following conditions. Should the Discharger elect to cease all ASBS discharges, the Discharger shall meet those conditions which are applicable until all ASBS discharges cease:
 - a. The Discharger shall prepare a draft CEQA document supporting the exception request and submit it to the State Board.
 - b. The Discharger must cease all non-storm water discharges to the ASBS, except (i) fire fighting water, and (ii) those non-storm water discharges allowed in the Phase II General Permit, Section D.2.c.6, given that the discharges are not significant contributors of pollutants to ASBS.
 - c. The Discharger is required to specifically address the prohibition of non-storm water discharge into the ASBS in their Storm Water Management Plan (SWMP), and to revise the SWMP accordingly. The revised SWMP must describe the measures by which non-storm water discharges to the ASBS will be eliminated within three years of the CDO date, and interim measures that will be employed to reduce non-storm water flows until the ultimate measures are implemented. The revised SWMP must be approved by the Regional Board Executive Officer.
 - d. The revised SWMP shall be designed to ensure an improvement in ASBS-area receiving water quality each year, due to either a reduction in storm water discharges, or reduction in pollutants (due to on-site treatment or other BMPs). The revised SWMP implementation must be developed to ensure non-structural BMPs are implemented within one year of this CDO issuance. Structural BMPs must be implemented as soon as practicable, but no later than the required implementation dates given in the Design Standards Plan, described in item (j), below.
 - e. The Discharger shall submit a monitoring and reporting plan to the Regional Board's Executive Officer for approval prior to implementation.
 - f. The monitoring and reporting plan must require storm water runoff (effluent) water quality sampling. Storm water effluent monitoring samples will be compared against Table A, Effluent Limitations, and Table C, Background Seawater Concentration, both from the 2001 California Ocean Plan, or another approved background data set. If the results of water quality monitoring indicate discharges exceed Table A or C water quality objectives, then the Discharger shall take all reasonable steps to identify the source(s) of the pollutant(s) and determine appropriate Best Management Practices (BMPs) to eliminate the causes of the pollutant(s). Once the Discharger has identified the source of pollutant(s) and appropriate BMPs, the Discharger shall submit a Report of Exceedance to the Executive Officer for approval.
 - g. A quantitative survey of benthic marine life must be performed and reported to the Regional Board Executive Officer.
 - h. A toxicity study to determine what effects, if any, storm water runoff pollutants have on marine life in the receiving water area.
 - i. A bioaccumulation study using sand crabs (*Emerita analoga*) and mussels (*Mytilus californianus*) must be

conducted to determine the concentrations of Table 1 metals

- j. The Discharger shall develop and submit for public review and comment, and Executive Officer approval, a Design Standards Plan (DSP) that describes measures to reduce pollutant discharges to the Maximum Extent Practicable from all new development and significant redevelopment projects, and individual priority project categories as defined in Attachment 4 of the Phase II Storm Water Permit. The DSP must be consistent with the applicable portions of State Board Order WQ 2000-11 and Attachment 4 of the Phase II Storm Water Permit. The DSP will apply to areas within the MS4 that discharge to the ASBS. Within one year of approval of the DSP, the Discharger shall amend, or adopt if needed, its own local Design Standards, including amendment of ordinances as needed.

DISCUSSION

1. Pending receipt of a State Board exception or complete cessation of ASBS discharges, the City of Pacific Grove, the City of Monterey, the Pebble Beach Company, and the City of Carmel by the Sea will continue to discharge storm water, and for a limited time, non-storm water to the ASBS. However, through application of the requirements of this CDO, the quality of the discharges will be controlled and potential impacts will be minimized. This phasing of discharge elimination, and the degree of expected elimination, matches the Scripps exception.
2. The four (4) CDOs rely on the respective SWMPs being revised and implemented at an accelerated pace, so that receiving water quality is improved annually. In these CDOs, the foundation of annual water quality improvement is based on pollutant loads decreasing due to BMP implementation and/or storm water diversion. It is anticipated that storm water quality, and benthic life monitoring will support this hypothesis. This is consistent with the approach the State Board took in the Scripps exception.
3. The Regional Board and this CDO recognize that not all of the municipalities' land masses are necessarily discharging to the ASBS. Consequently, the accelerated SWMP and the applicable sections of this CDO are to be applied to those physical areas that discharge to the ASBS, and not necessarily to the entire municipality. This defined application of the requirements will be protective of the ASBS, and will allow the municipalities to focus efforts and resources on the areas actually discharging to the ASBS.
4. The CDO requires storm water effluent water quality sample measurements be compared to values published in the Ocean Plan. The comparison is to be used as a guide for the municipalities to identify problem pollutants. It is not staff's intention for the values to be used as a numeric limit for the following reasons. First, the values from Table A, Effluent Limitations, "apply only to publicly owned treatment works and industrial discharges for which Effluent Limitations Guidelines have not been established ..." (pg. 11, Ocean Plan); therefore, these limitations should not be automatically applied to the municipal storm water runoff. Second, Table C, Background Seawater Concentrations, does not take into account any dilution effect as the storm water effluent mixes with the receiving ocean water. It would be unduly burdensome to require storm water runoff match background levels, given there is no data justifying that such restrictive effluent limitations are required to protect the ASBS. Third, background concentrations exist with on-going storm water runoff, which naturally contains many of the constituents in these Ocean Plan tables in a variety of concentrations, and fourth, applying numeric effluent limits to these four (4) municipalities would not be consistent with the Scripps exception,

which is the closest parallel enforcement to these four (4) CDOs.

5. The CDO Table 1 requires sampling for a list of constituents. The constituents complement the regional storm water sampling currently conducted, or to be conducted by/for: 1) The City of Salinas Phase I Storm Water Permit (Draft presented for adoption at the February 11, 2005 Regional Board meeting); 2) the Monterey Bay Marine Sanctuary's "Urban Watch", "First Flush", and "Snapshot Day" sampling programs; 3) Sampling for EPA Storm Water Phase II pollutants of concern; and 4) The Monitoring and Reporting Program requirements for all dischargers enrolled under Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands, Order No. R3-2004-0117 (Agriculture Waiver Program).

The CDO requires storm water effluent be sampled. Receiving water sampling is not required. Effluent sampling is consistent with the monitoring programs established for the Central Coast Ambient Monitoring Program, CCAMP, and the Draft Salinas Phase I Storm Water permit (on the February 11, 2005 Board agenda for adoption). Both programs are designed on the premise that effluent sampling is sufficient to indicate if/where/what pollutants are problematic. The resultant information is then used to locate and eliminate the pollutant sources.

The Phase II Storm Water permit lists pesticides and herbicides as potential urban pollutants. Because of the difficulty in knowing which pesticides or herbicides to test for, and because individual constituent tests would not detect the potential synergistic effects of a mix of pollutants, this CDO sampling program relies on toxicity testing as a means to determine the true effect of the effluent on the biota. Regional Board staff believes that toxicity testing is a better indicator test than attempting to test for individual pollutants.

8. The purpose of the monitoring and reporting plan, and the marine life survey

are to gather background information on the effluent water quality as compared to receiving water quality, and benthic marine life. If background data exists, the Discharger may propose to utilize this data in full or as a portion of the monitoring and reporting plan. The Discharger may work with other groups to fulfill the monitoring and reporting plan requirements. Regardless of whether other ASBS-dischargers agree to a collaborative effort, each Discharger must submit a draft monitoring and reporting plan to the Regional Board's Executive Officer for approval.

6. In developing the Scripps exception, the discharger (Scripps) was required to gather two year's worth of background water quality and marine life data. The time line and requirements of this CDO should enable the discharger and the State Water Resources Control Board to gather background data on effluent quality and ASBS-area benthic life conditions, so that appropriate ASBS-exception, long-term conditions can be developed.

PUBLIC COMMENTS

The proposed CDOs were released for public comment on December 23, 2004 via email to all persons listed on the interested parties list. Comments from these parties are summarized and addressed in this Staff Report as follows:

PLACEHOLDER FOR PUBLIC COMMENT RESPONSES

PUBLIC HEARING

The Regional Board will hold a public hearing regarding the proposed Cease and Desist Order. The public hearing is scheduled to be held on February 11, 2005, in Salinas, California. Exact location address and Regional Board hearing agenda will be posted to the Regional Board website,

<http://www.waterboards.ca.gov/centralcoast/>.

Further information regarding the conduct and nature of the public hearing concerning this

draft order may be obtained by writing or visiting the Central Coast Regional Water Quality Control Board office, at 895 Aerovista Place, Suite 101, San Luis Obispo, CA 93401.

INFORMATION AND COPYING

Persons wishing further information may write to the above address or call Donette Dunaway (805) 549-3698. Copies of the proposed order and its attachments, and other documents (other than those that the Executive Officer maintains as confidential) are available at the Regional Board office for inspection and copying by appointment.

ATTACHMENTS

1. Cease and Desist Order for the City of Pacific Grove, Order No. R3-2005-0008
2. Cease and Desist Order for the City of Monterey, Order No. R3-2005-0020
3. Cease and Desist Order for the Pebble Beach Company, Order No. R3-2005-0021
4. Cease and Desist Order for the City of Carmel by the Sea, R3-2005-0022
5. Overview Map of Areas of Biological Significance
6. Map of Pacific Grove Marine Gardens Fish Refuge and Hopkins Marine Life Refuge ASBS (ASBS No. 19)
7. Map of Carmel Bay ASBS (ASBS No.34)

RECOMMENDATIONS

Adopt Cease and Desist Orders No. R3-2005-0008, R3-2005-0020, R3-2005-0021, and R3-2005-0022, as proposed.

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